

That which is claimed is:

1. A method for directly forming and finishing a rolled paper web product, the method comprising the steps of:
- a) forming a paper web on a paper forming apparatus;
 - 5 b) continuously transferring the formed paper web to a conveyor positioned downstream from the forming apparatus;
 - c) performing a converting step on the paper web as the paper web continuously advances on the conveyor; and
 - 10 d) winding the paper web into the rolled paper web product in a form substantially ready for packaging.
2. The method of claim 1, wherein the paper web is dried before being transferred to the conveyor. ✓
3. The method of claim 1, wherein the conveyor is disposed adjacent the paper forming apparatus.
- 15 4. The method of claim 1, wherein the converting step is selected from the group consisting of coating, spreading, s-wrapping, calendering, embossing, printing, perforating, and combinations thereof.
- 20 5. The method of claim 1, further comprising the substeps of monitoring a desired amount of the paper web and severing the desired amount of the paper web before the winding step.

6. A method for manufacturing and finishing a rolled paper web product without requiring a parent roll reeling step and an unwinding step, the method comprising the steps of:

- 5 a) depositing an aqueous suspension of papermaking fibers onto an endless forming fabric to form a wet web;
- b) transferring the wet web to a dryer for drying the wet web;
- c) creping the dried web from the dryer to obtain a creped web;
- d) continuously advancing and transferring the creped web from the dryer to a first conveyor, the first conveyor being positioned
10 downstream from the dryer and configured to run across pick-up means disposed proximate the dryer for picking up the web;
- e) receiving the creped web on the first conveyor by the pick-up means;
- f) guiding and continuously supporting the web between the first
15 conveyor and a second conveyor;
- g) transversely spreading the web;
- h) processing the web at a processing station;
- i) transversely perforating the web with a perforator disposed downstream of the processing station such that the web defines a
20 substantially lateral perforation;
- j) severing the web along the lateral perforation on the web with a severing device disposed proximate the perforator; and
- k) winding the web and a core into the rolled paper web product.

7. The method of claim 6, wherein the processing station is selected from the group consisting of a calendering station, an embossing station, a printing station, and combinations thereof.
8. The method of claim 7, wherein the calendering station defines a
5 calendering nip formed by a calender roll and an opposing roll; the embossing station defines an embossing nip formed between a pattern roll and a backing roll, the pattern roll having a surface with a plurality of discrete spot embossing elements separated by a plurality of smooth land areas; and the printing station has a printer configured
10 to print on a surface of at least one side of the web.
9. The method of claim 8, wherein the calender roll is a smooth steel roll and the opposing roll is a resilient rubber roll.
10. The method of claim 8, wherein the printer is disposed upstream of the embossing nip.
11. The method of claim 6, further comprising the substep of applying an
15 adhesive to attach the web to the surface of the core such that the edge of the web to a surface of the core at the start of the winding step.
12. The method of claim 6, further comprising the substep of continuously
20 coating the web with at least one coater.

13. The method of claim 10, wherein the coating substep coats the element with a lotion formulation.

14. The method of claim 11, wherein the lotion formulation includes from between 5 to about 95 weight percent of an emollient, from between 5 to about 95 weight percent of a wax and from between 0.1 to about 25 weight percent of a viscosity enhancer selected from the group consisting of polyolefin resins, polyolefin polymers, polyethylene, lipophilic/oil thickeners, ethylene/vinyl acetate copolymers, silica, talc, colloidal silicone dioxide, zinc stearate, cetyl hydroxy ethyl cellulose and mixtures thereof.

15. The method of claim 6, further comprising the substep of selectively winding the web into a parent roll for subsequent processing before step k).

16. The method of claim 15, further comprising a modular reel and bypass apparatus to selectively wind the parent roll, the modular reel and bypass apparatus disposed proximate the processing station.

17. The method of claim 6, further comprising a pulper for broke handling of the web, the pulper configured to receive a broken portion of the web.

18. The method of claim 17, wherein the pulper is a plurality of pulpers disposed between the first conveyor and the severing device, at least one of the plurality of pulpers disposed proximate a winder in step k) such that the web is continuously moved on the first conveyor.

5 19. The method of claim 18, further comprising an open draw disposed between the first conveyor and the winder, the draw configured to redirect the broken portion of the web in a direction away from the first conveyor and further comprising the substep of transferring the broken portion of the web to the pulper.

10 20. The method of claim 6, further comprising a vacuum box to suctionally control and transfer the continuously advancing paper web.

21. The method of claim 6, wherein the web in step g) is spread by a spreading element selected from the group consisting of a vacuum box, a spreader bar, a Mount Hope roll, and combinations thereof.

22. The method of claim 6, further comprising the step of folding the web to create multiply tissue prior to the winding step.

23. The method of claim 6, further comprising means for forming the rolled paper web product with multiple plies.

24. The method of claim 6, wherein the rolled paper web product has a diameter of from between about 3.5 inches to about 6.5 inches.

25. A web manufacturing system for directly forming and finishing a web product, the web manufacturing system comprising:

5 a web forming apparatus for forming and drying the web product;

transfer means for transferring the formed and dried web product from the web forming apparatus;

10 a conveyance system positioned downstream from the transfer means, the conveyance system configured to continuously receive at a standard web processing speed the formed and dried web product from the transfer means for transferring;

a converting station for finishing the web as the web continuously advances on the conveyance system at the standard web processing speed;

15 a winding element for winding the web into the web product; and

means for continuously supporting the web from after the step of transferring the web to the conveyance system to the step of winding the web into the web product.

26. The paper web manufacturing system of claim 23, wherein the

20 converting station is selected from the group consisting of a coating station, a spreading station, an s-wrapping station, a calendering

station, an embossing station, a printing station, a perforating station, and combinations thereof.

27. The paper web manufacturing system of claim 23, wherein the means for continuously supporting the web is selected from the group consisting of a fabric conveyor, a foil, a vacuum shoe, an adjustable vacuum transport conveyor and combinations thereof, the means for continuously supporting the web operable at the standard web processing speed.

28. The paper web manufacturing system of claim 23, further comprising an interfolder for folding the web product.

29. A method for manufacturing and finishing an uncreped through-air dried web product from an aqueous suspension of fibers forming an endless wet web on a forming fabric, the method comprising the steps of:

- a) transferring the dried web from the dryer to a conveyor, the dryer and the conveyor configured to cooperate at substantially a single operating speed;
- b) continuously advancing the web on the conveyor, the conveyor configured to substantially support the web during a converting process;
- c) converting the web in the converting process;
- d) perforating the web with a perforator; and

- e) severing the perforated web with a severing device disposed proximate the perforator to form a finished web product.

30. The method as in claim 29, wherein the converting step is selected from the group consisting of a calendering step, an embossing step, a printing step, and combinations thereof.

31. The method as in claim 30, wherein the calendering step is performed by a calender roll and an opposing roll.

32. The method as in claim 30, wherein the embossing step is performed by a pattern roll and a backing roll.

33. The method of claim 29, further comprising the substep of continuously coating the web with a coater.

34. The method of claim 33, wherein the coater is a coating roller.

35. The method of claim 33, wherein the coater is plurality of coaters configured to coat the web with a plurality of coatings.